

Notice of Allowability

Application No.

10/724,229

Examiner

Nguyen T Ha

Applicant(s)

TANO ET AL.

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/1/2003.
2. ☒ The allowed claim(s) is/are 1-10.
3. ☒ The drawings filed on 01 December 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>0304 & 0604</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-10 are allowed.

The following is an examiner's statement of reasons for allowance:

With respect to claims 1-2 and 5-6, the prior art alone or in combination does not teach the limitation of a raw material composite for a carbon material used in an electric double layer capacitor containing microcrystalline carbon, the raw material composite being formed into a carbon material for an electric double layer capacitor by undergoing an activation treatment, wherein a crystallite size L_{C002} of the microcrystalline carbon determined by the X-ray diffraction method being 3.0 nm or below.

With respect to claims 3-4, the prior art alone or in combination does not teach the limitation of a method of manufacturing a raw material composite for a carbon material used in an electric double layer capacitor, the raw material composite containing microcrystalline carbon being formed into the carbon material for an electric double layer capacitor by undergoing an activation treatment, wherein the raw material carbon having an integrated intensity of an X-ray diffraction peak corresponding to a 002 lattice plane equal to or more than 10% of graphite.

With respect to claims 7-10, the prior art alone or in combination does not teach the limitation of a method of manufacturing an electric double layer capacitor comprising a raw material carbon containing the microcrystalline carbon, wherein the raw material carbon having an integrated intensity of an X-ray diffraction peak corresponding to a 002 lattice plane equal to or more than 10% of graphite, and an interlayer distance d_{002}

of the microcrystalline carbon being 0.337 nm or below and a crystallite size La_{110} of the microcrystalline carbon being 80 nm or above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Citation Relevant of Prior Art

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Tennent et al. (US 6,665,169) disclose graphitic nanofibers in electrochemical capacitors.

b. Niiori et al. (US 6,487,066) disclose electric double layer capacitor and method for producing the same.

c. Niu (US 6,205,016) discloses fibril composite electrode for electrochemical capacitors.

d. Saito et al. (US 5,786,555) disclose polarizable electrode for electric double layer capacitor.

e. Zhang et al. (US 5,690,901) disclose carbon electrode materials for electrochemical cells and method of making.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T Ha whose telephone number is 571-272-


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1974. The examiner can normally be reached on Monday-Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext. 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen T. Ha
December 11, 2004


DEAN A. REICHARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800